

REMARKS

Applicants acknowledge the decision of the Panel to reopen prosecution on the merits of Applicants' arguments Presented in the Appeal Brief filed March 2, 2007. Applicants acknowledge that prosecution has been reopened and a non-final office action has been issued. Applicants exercise the option of filing a reply under 37 C.F.R. 1.111 to the non-final Office Action dated May 16, 2007.

Claims 1-26 remain pending in this application. Claim 5-7 and 21-23 are objected to as being dependent upon rejected base claims but would be allowed if rewritten in independent form. Claim 24 might be allowed, subject to final search.

In the present Office Action, the Examiner rejected claims 1-4, 8-20, 25 and 26 under 35 U.S.C 103(a) as being unpatentable over *McKee* (US 6,745,307) in view of *Breslau* (US 5,765,205). Applicants respectfully traverse this rejection.

Applicants respectfully assert that the combination of *McKee* and *Breslau* do not teach or make obvious all of the elements of claims of the present invention. The Examiner has misapplied the disclosure of *McKee*. For example, contrary to the Examiner's assertions, *McKee* does not establish a security level for a software object. *McKee* simply discloses a combination of read, write and execute privileges that specify the privilege level required for an accessing process. See *McKee*, col. 8, lines 9-16. The protection key contains information for specifying an access mode, and a valid bit containing data indicative of whether or not the protection key is valid. *Id.* However, no specific security level(s) for a particular software object is disclosed or made obvious by *McKee*.

Further, the Examiner misapplies the disclosure relating to the virtual page table disclosed by *McKee*. The Examiner asserts that the element of performing the virtual address memory based access of claim 1, which comprises using a secondary table and at least one virtual table, is allegedly disclosed or made obvious by *McKee*. The Examiner supports this position by asserting that *McKee* discloses a “virtual page table 602” and a “virtual page table 604.” This is an incorrect assessment of the disclosure of *McKee*. *McKee* actually discloses only a single virtual page table, which is labeled by the reference number “604.” The Examiner mistakenly interprets the reference number “602” as another virtual table, but this is a false interpretation of *McKee*. The reference number “602” refers to a virtual page table entry. See specifically, col. 8, lines 53-55 of *McKee*. Further, upon a close examination of Figure 6, a single virtual page table 604 is disclosed and the “break” shown in Figure 6 refers to a continuation of the same table. The reference number “602” does not refer to another virtual page table, but instead, it refers to a single entry of the “virtual page table 604.” Therefore, the Examiner is incorrect in asserting that *McKee* discloses or makes obvious a secondary page table and at least one virtual table. Additionally, *Breslau* does not make up for the deficit of *McKee*.

Further, the Examiner cites *Breslau* to make obvious the element of at least one virtual memory table. The Examiner admits that *McKee* does not specifically claim at least one virtual memory table, but seems to assert that the virtual page table 604 accounts for at least one virtual table of the claim. But in any rate, *Breslau* does not make up for the deficit of *McKee*. Combining *Breslau* with *McKee* would still not disclose or make obvious performing a virtual address based memory table using a secondary table and at least one virtual table, as called for

by claim 1 of the present invention. This is true because neither **Breslau** nor **McKee** disclose using a secondary table and at least one virtual table.

Breslau is merely directed to transferring computer codes from a source computer to a target computer. **Breslau** discloses that virtual memory tables of the target computer may be used to identify the source of virtual memory pages, which have been updated to point to the source computer regarding memory pages of a program. The program is then executed. See col. 6, lines 38-51 of **Breslau**. Even though **Breslau** discloses a virtual memory table it fails to disclose or make obvious performing a virtual address memory access based on a secondary table and at least one virtual table. As described below in further detail, **McKee** simply does not disclose a secondary table and using at least one virtual table to perform a virtual address based memory access. Simply citing an additional prior art reference that discloses a virtual memory table does not make up for the fact that none of the cited reference, alone or in combination, would make obvious performing the virtual address memory access based upon a secondary table and at least one virtual table. Since neither prior art references cited by the Examiner teach performing a virtual memory address using a secondary table and at least one virtual table, as called for by claim 1 of the present invention, adding any number of prior art references that simply disclose a virtual memory table would not make for the lack of disclosure of any of the prior art. The Examiner has failed to provide prior art references that, alone or in combination, would disclose or make obvious the claim feature of the virtual address memory access using a secondary table and at least one virtual table.

McKee discloses a translation look-aside buffer (TLB) and a virtual page table 604, however, it does not teach or suggest a virtual address memory access using a secondary table

and at least one virtual table. The TLB contains data that is actually written by an operating system. For example, *McKee* discloses that the virtual page table entry 602 contains additional fields from which information required for a TLB entry can be retrieved. See col. 8, line 66 col. 9, line 1. *McKee* discloses that if the operating system successfully translates the virtual memory address into a physical memory address, that translation, both as a virtual page table entry and as a TLB entry, is inserted into the TLB. See col. 9, lines 1-4. This disclosure makes it clear that data is entered into the TLB as a result of translating virtual memory address into physical memory address, and not used to perform a virtual address based memory access. In other words, the virtual address based memory access is not performed using the TLB and the virtual page table 602, contrary to the Examiner's assertions. In fact, the above cited passage in *McKee* makes it abundantly clear that the prior art discloses that memory access is performed prior to writing data into the TLB *i.e.*, the virtual memory address being translated into a physical memory address. Subsequently, that information is then entered into the TLB. Further, as described above, contrary to the Examiner's position *McKee* discloses two virtual page tables, *McKee* only discloses a single table. Therefore, it is erroneous to argue that the virtual address memory access in *McKee* is performed using two entities. Hence, the disclosure of the memory access in *McKee* is in stark contrast with the virtual address based memory access called for by claim 1 of the present invention, which calls for using a secondary table and a virtual memory table. Simply adding the virtual memory table of *Breslau* does not make for the fact that neither cited prior art disclose or make obvious a virtual address memory access using a secondary table and at least one virtual table. Adding any number of prior art references that merely disclose virtual page tables would not make up for this deficit.

Similarly, claim 8 calls for a method that provides for the memory access using a virtual address, wherein the access includes utilizing a secondary table, as well as at least one virtual memory table. Additionally, claims 12, 13 and 17 call for various apparatus and/or computer systems that called for performing a memory access using a virtual address, wherein the access includes utilizing a secondary table as well as at least one virtual memory table. Therefore, claims 8, 12, 13 and 17 are also not taught disclosures suggested by *McKee* for at least the reasons cited above.

Independent claims 1, 8, 12, 13, and 17 are allowable for at least the reasons cited above. Additionally, dependent claims 2-7, 9-11, 14-16, and 18-23, which respectively depend from claims 1, 8, 12, 13, and 17, are also allowable for at least the reasons cited above.

For at least the reasons cited above, the combination of *McKee* and *Breslau* does teach, disclose or make obvious all of the elements of claim 1 of the present invention. Applicants acknowledge and appreciate that the Examiner has indicated that claims 5-7 and 21-23, as well as claim 24, contain allowable subject matter, however, in light of the arguments presented herein, Applicants respectfully assert that all claims of the present invention are allowable.

Reconsideration of the present application is respectfully requested. In light of the arguments presented above, Applicants respectfully assert that claims 1-26 are allowable. In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, **the Examiner is requested to call the undersigned attorney at the Houston,**

Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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